

**INTRODUCTION:**

Adam Tech .050" IDC Sockets and transition plugs are low profile, precision designed flat cable connectors that feature either .050" x .100" centerlines or .050" x .050" centerlines. These series quickly and easily mass terminate flat cable in one simple step. Our superior contact design provides a smooth high pressure wiping action to ensure excellent continuity. They are used with a single layer of .025" flat cable. Their small size, light weight and high density make them ideal for compact and limited space applications.

**FEATURES:**

- .050" x .050" or .050" x .100"
- Low Profile and High Density
- Uses Single layer .025" Flat Cable
- Quickly and easily mass terminates standard Flat Cable
- Smooth High Pressure Wiping Contacts

**MATING CONNECTORS:**

Adam Tech .050" HBHR series box headers or HPH2 series pin headers

**SPECIFICATIONS:**

**Material:**

Insulator: PBT, glass reinforced, rated UL94V-0  
 Insulator Color: Black  
 Contacts: Phosphor Bronze

**Contact Plating:**

Tin over copper underplate overall

**Electrical:**

Operating voltage: 250V AC max.  
 Current rating: 1 Amp max.  
 Contact resistance: 20 mΩ max. Initial  
 Insulation resistance: 5000 MΩ min.  
 Dielectric withstanding voltage: 1000V AC for 1 minute

**Mechanical:**

Insertion force: 0.312 lbs per contact max.  
 Withdrawal force: 0.094 lbs per contact min.  
 Recommended wire size: 28 Awg stranded  
 Cable retention: 22 lbs. min axial force per inch.  
 Mating durability: 500 cycles min.

**Temperature Rating:**

Operating temperature: -40°C to +105°C

**PACKAGING:**

Anti-ESD plastic trays

**SAFETY AGENCY APPROVALS:**

UL Recognized File No. E224053  
 CSA Certified File No. LR1578596



**ORDERING INFORMATION**



**SERIES INDICATOR**

- HFCS** = Low profile .050" x .100" IDC Socket for single layer .025" Flat Cable
- HFCS-A** = Low profile .050" x .050" IDC Socket for single layer .025" Flat Cable
- HFDP** = .050" Paddleboard Connector for single layer .025" Flat Cable
- FDH** = 4 Row Transition plug

**PLATING**

- SG** = Selective gold plating in contact area
- T** = Tin plated (HFDP)

**POSITIONS**

- HFCS:** 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
- HFCS-A:** 10, 20, 26, 34, 40, 50
- HFDP:** 30, 50, 68, 72, 80, 100
- FDH:** 10, 14, 16, 20, 26, 34, 40, 50, 60

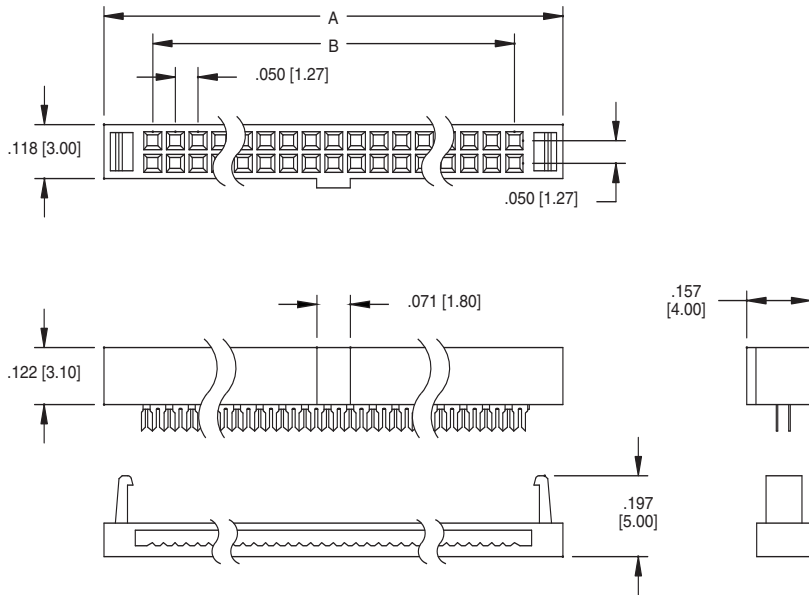
**HFCS Strain Relief**

**Part No.:**  
 HFSR - XX  
 (XX = No. of Positions)

**OPTIONS**

Add designator(s) to end of part number  
**N** = No polarization bump (HFCS series)

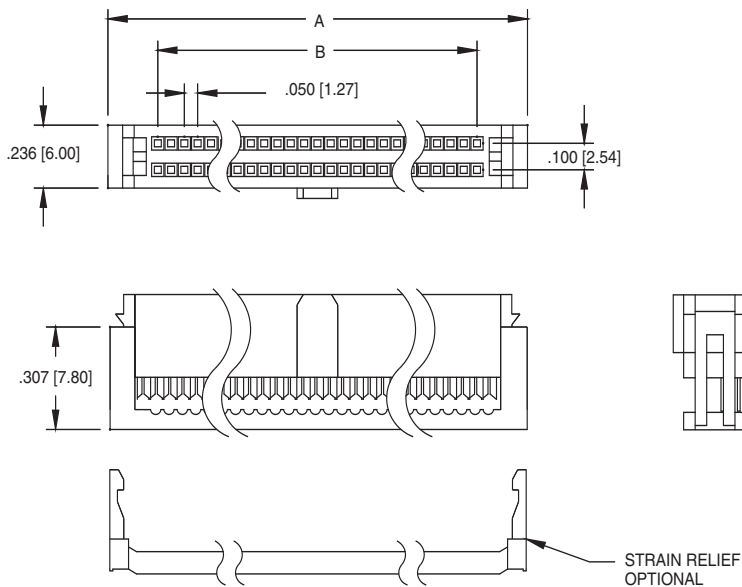
**HFCS-A**  
**.050" X .050"**



**HFCS-A-34-SG**

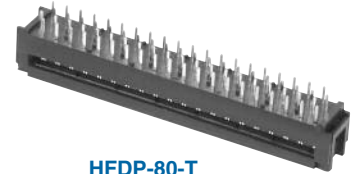
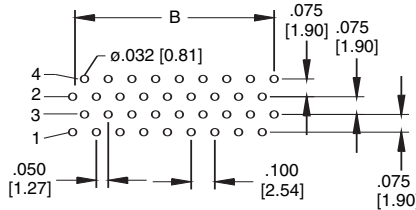
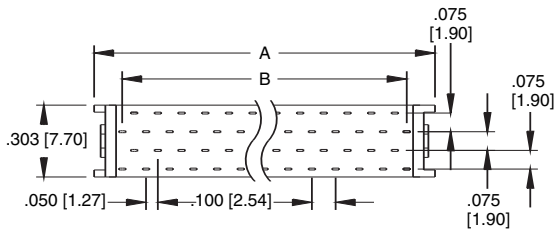
PART No. & POSITIONS	DIMENSIONS	
	A	B
HFCS-A-10	.413 [10.50]	.450 [5.08]
HFCS-A-20	.665 [16.90]	.450 [11.43]
HFCS-A-26	.815 [20.70]	.600 [15.24]
HFCS-A-34	1.016 [25.80]	.800 [20.32]
HFCS-A-40	1.165 [29.60]	.950 [24.13]
HFCS-A-50	1.413 [35.90]	1.200 [30.48]

**HFCS**  
**.050" X .100"**



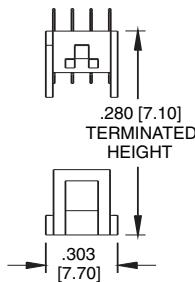
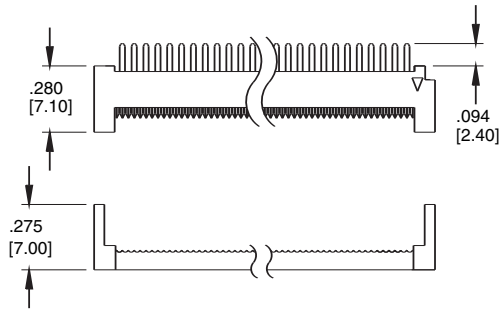
**HFCS-40-SG**

PART No. & POSITIONS	Dimensions	
	A	B
HFCS-10	0.200 [11.10]	0.437 [5.08]
HFCS-20	0.450 [17.45]	0.687 [11.43]
HFCS-30	0.700 [23.80]	0.937 [17.78]
HFCS-40	0.950 [30.15]	1.187 [24.13]
HFCS-50	1.200 [36.50]	1.437 [30.48]
HFCS-60	1.450 [42.85]	1.687 [36.83]
HFCS-70	1.700 [49.20]	1.937 [43.18]
HFCS-80	1.950 [55.55]	2.187 [49.53]
HFCS-90	2.200 [61.90]	2.437 [55.88]
HFCS-100	2.450 [68.25]	2.687 [62.23]

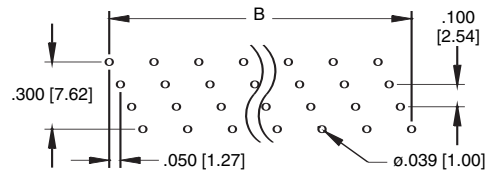
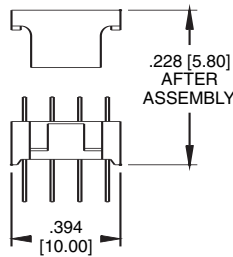
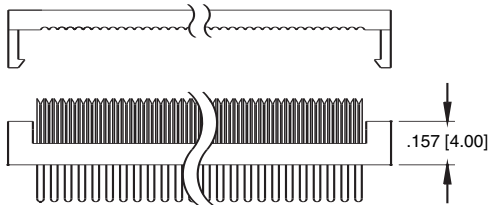


HFDP-80-T

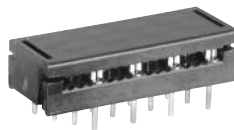
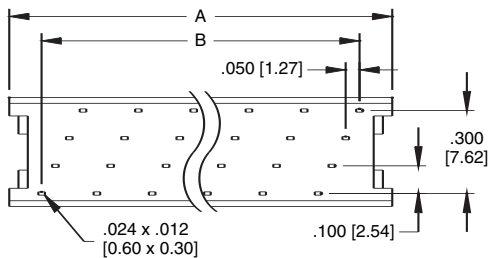
Recommended PCB Layout



Part No.	DIMENSIONS			
	A		B	
	in	mm	in	mm
HFDP-30	0.938	23.83	0.700	17.78
HFDP-50	1.438	36.53	1.200	30.48
HFDP-68	1.888	47.96	1.650	41.91
HFDP-80	2.188	55.58	1.950	49.53
HFDP-100	2.688	68.28	2.450	62.23



Recommended PCB Layout



FDH-34-T

Part No.	DIMENSIONS			
	A		B	
	in	mm	in	mm
FDH-10	.689	17.50	.450	11.43
FDH-14	.889	22.58	.650	16.51
FDH-16	.989	25.12	.750	19.05
FDH-20	1.189	30.20	.950	24.13
FDH-26	1.489	37.82	1.250	31.75
FDH-34	1.889	47.98	1.650	41.91
FDH-40	2.189	55.60	1.950	49.53
FDH-50	2.689	68.30	2.450	62.23
FDH-60	3.189	81.00	2.950	74.93